

XXXV.—*Descriptions of a new Genus and of new Species of Halcinæ.* By JOSEPH S. BALY, F.L.S.

Genus HYPHISIS, v. Harold,

Deutsch. ent. Zeit., Dec. 1877, p. 433.

Corpus rotundato-ovatum, modice convexum. *Caput* in thoracem insertum, *facie* perpendiculari; *encarpis* distinctis, contiguis; *carina* lineariformi, elevata; *antennis* filiformibus. *Thorax* transversus, lateribus reflexo-marginatis. *Scutellum* trigonatum. *Elytra* thorace latiora, reflexo-marginata, modice convexa, confuse punctata; *limbo* inflexo concavo, margine externo deorsum producto. *Pedes* mediocres, *femoribus* posticis valde incrassatis; *tibiis* dorso canaliculatis, posticis extus ante apicem emarginatis, apice spina acuta armatis; *tibiis* anticis quatuor apice inermibus; *tarsis* posticis articulo basali duobus sequentibus conjunctis longitudine æquali vel longiore; *unguibus* posticis inflatis; *unguiculis* appendiculatis. *Prosternum* oblongum aut anguste oblongum, apice obtusum aut truncatum, disco plano aut longitudinaliter concavo; *acetabulis* anticis apertis. *Mesosternum* obliquum aut subhorizontale, apice emarginatum.

The short, plane or longitudinally concave prosternum, the concave inflexed limb of the elytron, together with the general form of the body, will, combined, separate this genus from *Homophoeta*; the form of the prosternum, together with the difference in the length of the basal metatarsal joint, will separate it from *Edionychis*.

Hyphasis coccinelloides.

H. rotundato-ovata, modice convexa, pallide flava, nitida, antennis (basi excepta) fuscis; oculis nigris; thorace lævi, obsolete punctulato; elytris subcrebre punctatis, utrinque maculis subrotundatis quinque nigris ornatis, harum prima communi circa scutellum, secunda vix infra basin supra callum humerale, rotundato-ovata, duabus prope medium transversim positis, quintaque ante apicem, prope limbum externum sita.

Long. $2\frac{2}{3}$ lin.

Hab. Borneo, Sarawak. Collected by Mr. Wallace.

Vertex shining, impunctate; encarpæ transversely quadrate; carina elongate, its upper end thickened; antennæ with the four lower joints flavous, stained with piceous, the rest fuscous. Thorax more than three times as broad as long; sides broadly margined, strongly reflexed, rounded and converging from base to apex, parallel at the extreme base, the anterior angles thickened, armed with a small excurved, acute tooth; surface nitidous, faintly impressed here and there with fine punctures; lateral margin longitudinally excavated. Apex

of scutellum obtuse. Elytra much broader than the thorax, the shoulders broadly rounded; above moderately convex; sides dilated, reflexed; surface rather strongly punctured. Basal joint of metatarsus longer than the following two united.

Hyphasis bipustulata.

H. late ovata, modice convexa, picea, nitida, antennis (basi excepta) nigris; thorace lævi, fere impunctato; elytris nigro-piceis, tenuiter sed evidenter punctatis, utrinque pustula magna ovata flava ornatis.

Long. $1\frac{2}{3}$ lin.

Hab. Celebes (collected by Mr. Wallace), also Birmah.

Head and thorax fulvo-piceous; vertex shining, impunctate; encarpæ transverse, oblong; antennæ nearly three fourths the length of the body, filiform, the two lower joints piceous, the rest black. Thorax three times as broad as long; sides rather broadly margined, reflexed, rounded, converging at the base, and again from behind the middle to the apex; anterior angles thickened, obtuse, slightly excurved; upper surface smooth and shining, nearly impunctate, a few fine punctures only being seen under a powerful lens; lateral margin longitudinally concave. Scutellum piceous, its extreme apex obtuse. Elytra much broader than the thorax, rotundate-ovate, the shoulders broadly rounded; above moderately convex, the lateral margin reflexed; nigro-piceous, obscure rufo-piceous on the middle disk, finely but distinctly punctured; each elytron with a large subovate pale yellow patch, which extends from just before to some distance below the middle of the disk, and laterally from within the outer limb to within a short distance of the suture. Basal joint of hinder tarsus equal in length to the following two united.

Hyphasis piceipennis.

H. rotundata, modice convexa, fulva, nitida, capite thoraceque rufo-testaceis, antennis (basi excepta) oculisque nigris, tibiis tarsisque nigro-piceis; elytris tenuissime punctatis, piceis.

Long. 2 lin.

Hab. Borneo, Sarawak.

Face elevated between the eyes; the latter large, prominent; encarpæ quadrangular, well defined, contiguous; carina linear, strongly elevated; antennæ nearly three fourths the length of the body, filiform, two lower joints fulvous, the rest black, the third joint twice the length of the second, rather shorter than the fourth. Thorax three times as broad as long; sides broadly margined, reflexed, obtusely rounded, converging in

front, the anterior angles armed with a slightly excurved, obtuse tooth; upper surface nitidous, very minutely punctured, the puncturing only visible under a lens. Scutellum trigonate, its apex acute. Elytra much broader than the thorax, the shoulders broadly rounded; above moderately convex, flattened on the disk, minutely punctured, lateral margin narrowly dilated, impressed on its inner edge with a single row of distinct punctures. Prosternum twice as broad as long, its sides parallel, its apex truncate, its surface longitudinally concave. Apices of the thighs piceous; tibiæ and tarsi nigropiceous; hinder tibia armed near its apex with a short acute tooth; hinder metatarsal joint equal in length to the following two united.

Hyphasis nigricornis.

H. late ovato-rotundata, modice convexa, dorso paullo deplanata, flava, nitida, antennis (basi excepta) oculisque nigris, scutello, pectore tarsisque piceis; thorace minute punctato; elytris distincte, suberebre punctatis.

Long. $2\frac{1}{2}$ lin.

Hab. Northern India.

Face elevated between the eyes, the latter smaller and more widely separated than in *H. piceipennis*; encarpæ transverse-quadrata, contiguous, separated from the front by a deep transverse depression; carina strongly raised; vertex and front nitidous, impressed with a few minute punctures, only visible under a lens; antennæ more than three fourths the length of the body, slender, filiform, the three lower joints obscure flavous, the rest black, the third joint one half longer than the second, distinctly shorter than the fourth. Thorax more than three times as broad as long; sides broadly margined, reflexed, nearly straight and parallel behind the middle, rounded and converging in front, the anterior angles armed with an obtuse, excurved tooth; hinder angles distinct, subacute; upper surface impressed with minute punctures, the interspaces still more finely punctured. Scutellum scarcely longer than broad, trigonate, its sides subsinuate, its apex subacute. Elytra very much broader than the thorax, the shoulders broadly and somewhat obliquely rounded; upper surface distinctly and rather closely punctured, the lateral margin broadly dilated, only slightly reflexed. Prosternum narrowly oblong, slightly sinuate on the sides, the apex obtuse; surface only faintly excavated. Hinder tibiæ unarmed; hinder metatarsal joint longer than the following two united.

Hyphasis Wallacei.

H. late ovata, convexa, sordide fulva, nitida, antennis nigris, tarsis, tibiis posticis apice, tibiis anticis totis femoribusque anticis dorso nigro-piceis; thorace lævi, lateribus late nigris; elytris subfortiter punctatis, utrinque plaga magna humerali, ad marginem adfixa, postice oblique truncata, alteraque pone medium, subovata, apice acuminata, vix intra marginem posita, ornatis.

Long. 3 lin.

Hab. Malacca (*Wallace*).

Vertex smooth, impunctate; eyes large, rotundate, prominent, black; encarpæ well defined, obliquely transverse, quadrangular; carina elongate, its upper half thickened; antennæ nearly three fourths the length of the body, black, lower portion of basal joint obscure flavous. Thorax three times as broad as long; sides broadly margined, strongly reflexed, rounded, the anterior angle armed with an excurved, subacute tooth, hinder angle with an obtuse tubercle; upper surface shining, very remotely impressed with minute punctures; lateral margin longitudinally concave. Apex of scutellum rounded. Elytra broader than the thorax, oblong, convex, their lateral margin narrowly dilated, reflexed.

Hyphasis Bevani.

H. ovata, convexa, nitida, subtus fulva, metapectore, femoribus posticis apice tarsisque posticis piceis; supra rufo-fulva, antennis (basi excepta) nigris; thorace evidententer, subremote punctato; elytris subcrebre punctatis, obscure viridi-æneis, limbo exteriori anguste rufo.

Long. $1\frac{1}{4}$ lin.

Hab. Southern India. Collected by Lieut. Bevan.

Head trigonate; vertex and front smooth, impunctate; inner orbit of eye coarsely punctured; encarpæ well defined, separated from the front by a transverse groove, subtrigonate, contiguous; carina linear, its apex thickened, obtuse; antennæ with the two lower joints fulvous, the following two piceous, the rest black; labrum and apex of jaws piceous. Thorax nearly three times as broad as long; sides obliquely rounded and converging from base to apex, the anterior angle thickened, broadly and obtusely truncate, oblique, produced laterally into an acute tooth; upper surface transversely convex, distinctly punctured; lateral margin moderately dilated, reflexed. Scutellum trigonate, its apex obtuse, edged with black. Elytra oblong, broader than the thorax, convex, rather strongly and closely punctured; obscure metallic green, the outer limb very narrowly edged with rufous; inflexed

limb slightly concave, its outer edge scarcely produced. Pro-sternum oblong-quadrate, the lateral margins concave, the apex truncate, the upper surface nearly plain; outer edge of hinder tibiæ serrulate near the apex; basal joint of hinder tarsus longer than the following two united.

This species differs from the typical form of the genus in its broader prosternum, and in the less strongly produced outer edge of the inflexed limb of the elytra.

Edionychis Mouhoti.

Æ. elongato-ovata, modice convexa, sordide flava, nitida, pectore picco; vertice scutelloque nigris; thorace ante basin leviter transversim impresso, tenuissime, remote punctato, lateribus late reflexo-explanatis; elytris sat fortiter, crebre punctatis, utrinque linea suturali maculisque tribus disco exteriori longitudinaliter positis, prima super callum humerale, basi adfixa, secunda prope medium tertiamque ante apicem, nigris.

Var. A. pectore sordide flavo, elytrorum linea suturali nigra obsoleta.

Long. 3 lin.

Hab. Siam, Pachybouri. Collected by the late M. Mouhot.

Vertex minutely punctured, front impressed with large round foveolate punctures; encarpæ subquadrate, contiguous; carina short, wedge-shaped, its acute apex extending upwards between the encarpæ for rather more than a third their length, its base terminating on a strongly raised transverse ridge, which extends obliquely on either side entirely across the clypeus; antennæ filiform, the third and fourth joints equal. Thorax three times as broad as long; sides broadly dilated, reflexed, straight and parallel for two thirds their length, rounded and converging near the apex, the latter anteriorly produced, armed at its extremity with a slightly excurved, truncate tooth; basal margin sinuate on either side near the outer angle, the intermediate space truncate; upper surface impressed before the base with a broad but shallow transverse groove; minutely and remotely punctured; lateral margin longitudinally concave. Scutellum trigonate, its apex rounded. Elytra rather broader than the thorax, convex, the outer margin moderately dilated, reflexed.

Edionychis pretiosa.

Æ. ovata, convexa, nitida, subtus nigro-picea, lateribus flavis; supra fulva, vertice, antennis, pedibus posticis scutelloque nigris; thorace impunctato; elytris subcrebre punctatis, metallico-cyaneis, vio-

laceo micantibus, utrinque macula prope medium limboque inflexo flavis.

Var. A. Elytrorum maculis discoidalibus flavis obsoletis.

Long. $2\frac{3}{4}$ lin.

Hab. Brazil, New Friburg.

Vertex strongly but not very closely punctured, shining black; lower face, together with the inner orbit of the eye, obscure fulvous, encarpæ and carina piceous; encarpæ separated from the front by a deep transverse groove; carina oval; antennæ with the three lower joints obscure piceous, the rest black, third joint shorter than the fourth. Thorax with its sides broadly margined, reflexed, nearly straight and parallel behind the middle, thence slightly rounded and converging to the apex, anterior angles produced anteriorly, thickened, obtuse; basal margin slightly bisinuate on either side, the median portion opposite the base of the scutellum also slightly sinuate; upper surface shining, nearly impunctate, longitudinally excavated on the reflexed lateral margin, obsoletely elevated on either side just to within the latter, the middle portion of both the apical and basal margins narrowly edged with black. Scutellum subtrigonal, its apex rounded, depressed. Elytra broader than the thorax, broadly ovate, moderately convex, longitudinally depressed along the base of the suture, distinctly punctured; inflexed limb flavous. Basal joint of hinder tarsus much shorter than the following two united.

Edionychis porosa.

E. ovata, convexa, nitida, nigra, facie inferiore fulvo-picea, thorace flavo; elytris irregulariter foveolatis foveis fundo punctatis, cyaneis, limbo laterali (apice dilatato) flavo.

Var. A. Elytris nigris, limbo laterali trienteque apicali flavis.

Var. B. ♂ thorace nigro, lateribus anguste flavis, elytris nigro-æneis, limbo exteriore anguste flavo.

Long. $3\frac{1}{2}$ –4 lin.

Hab. Ecuador. Collected by Mr. Buckley.

Front with a deep cruciform depression; on either side near the eye are three or four deep round punctures; the upper surface of the three lower joints of antennæ piceo-fulvous. Thorax with its sides broadly reflexed, parallel at the base, thence rounded and converging to the apex, anterior angles produced into a short obtusely truncate tooth; upper surface minutely punctured. Scutellum trigonal, its apex obtuse. Elytra moderately convex, their apical margin finely serrulate; closely covered with irregular punctured foveæ, their interspaces thickened, irregularly confluent, shining, impunctate.

Edionychis limbata.

Æ. elongato-ovalis, modice convexa, dorso subdepressa, subtus sordide albido-flava, prosterno, genibus, tibiis tarsisque nigro-piceis; supra nigra, antennarum articulis basali necnon ultimis quatuor piceis; facie, thoracis lateribus latis elytrorumque limbo exterioro lato albido-flavis; prosterno inter coxas longitudinaliter elevato. Long. $3\frac{1}{2}$ lin.

Hab. Ecuador.

Vertex and front smooth, impunctate; lower portion of front depressed, separated from the encarpæ by a transverse grooved line; encarpæ large, quadrangular, slightly oblique, contiguous; carina strongly raised, elongate; antennæ filiform, the third and fourth joints equal; labrum and jaws piceous; eyes large, prominent. Thorax with its sides very broadly margined, reflexed, slightly converging at the extreme base, rounded and converging before the middle to the apex, the anterior angles thickened, produced anteriorly into a slightly excurved, obtusely truncate tooth; basal margin very faintly sinuate on either side close to the outer angle, the intermediate space transversely truncate; upper surface very faintly impressed transversely in front of the base, very minutely punctured; lateral margin longitudinally excavated. Scutellum trigonate, its apex obtuse; on the disk near its apex is a piceous spot. Elytra broader than the thorax, oblong, moderately convex, slightly depressed along the suture, the lateral margin broadly dilated, its outer edge slightly reflexed; surface rather closely punctured, interspaces subrugulose, minutely punctured.

Edionychis circumcincta, Dej.

Æ. late ovata, convexa, flava, nitida, antennis (basi excepta) nigris; thorace lævi, lateribus late explanatis, subruguloso; scutello nigro; elytris crebre, fortiter punctatis, interstitiis granulosis, crebre rugulosis.

Var. A. elytris metallico-viridibus, limbo externo flavo.

Var. B. elytris rufo-testaceis, limbo externo flavo, fascia basali communi, extrorsum abbreviata, vittaque submarginali, a basi ad apicem extensa, metallico-viridibus.

Long. 4-6 lin.

Hab. Brazil.

Vertex smooth, impunctate; front very sparingly impressed with round punctures, its lower end depressed, separated from the encarpæ by a transverse groove; inner orbit of eye irregularly punctured; encarpæ transverse; contiguous above; carina broad, its apex acuminate, separating the lower portion of the encarpæ, its lower end terminating in a strongly

raised transverse ridge which extends entirely across the clypeus; jaws piceous; antennæ filiform, two lower joints flavous, the third piceous, the rest black; third joint distinctly shorter than the fourth. Thorax with its sides broadly margined, reflexed, straight and parallel from the base to beyond the middle, thence rounded and converging to the apex, anterior angles thickened, produced into a short excurved obtuse tooth; basal margin faintly sinuate on either side, its median portion truncate; upper surface smooth and shining, very faintly reticulate-granulose; surface of dilated lateral margin irregular, subrugulose. Scutellum trigonate, its apex obtuse. Elytra broader than the thorax, convex, slightly excavated on the suture, a short distance below the scutellum; coarsely and closely punctured, interspaces irregularly thickened, granulose.

Edionychis recticollis.

Æ. elongato-ovata, postice vix ampliata, convexa, subtus picea, abdomine sordide fulvo, prothorace lacteo; supra lactea, scutello pallide piceo, antennis (basi picea excepta) oculisque nigris; thorace impunctato, lateribus rectis, a basi ad apicem convergentibus; elytris tenuissime, subremote punctatis, utrinque plagis duabus erosis, una infra basin transversim ovata, altera inter medium et apicem transversa, irregulari, nigro-piceis ornatis.

Long. 4 lin.

Hab. Mexico.

Vertex smooth, impunctate; front impressed with coarse punctures; encarpæ ill-defined, pale piceous, separated from each other by a deep longitudinal groove; carina broad, oblong, convex, its apex obtuse, branching off on either side into a strongly raised oblique ridge; lower edge of clypeus and mouth nigro-piceous; eyes narrowly oval, their inner side sinuate; antennæ filiform, two lower joints piceous, the rest black; third and fourth joints nearly equal in length. Thorax twice as broad as long; sides narrowly margined, straight, converging from base to apex, anterior angle thickened, strongly produced, its apex subacute; basal margin slightly sinuate on either side near the outer angle, the intermediate space transversely truncate; upper surface smooth, impunctate, lateral margin narrowly reflexed. Scutellum longer than broad, trigonate, its apex obtuse. Elytra broader than the thorax, narrowly oblong, moderately convex, the lateral margin narrowly dilated.

Edionychis Clarkii.

Æ. elongato-ovata, modice convexa, pallide flava, nitida; thorace

lævi, maculis nigro-piceis quinque notato, harum tribus pone apicem, linea transversa conjunctis, macula intermedia ad marginem adfixa, duabusque transversis, ad basin utrinque adfixis; elytris subcrebre punctatis, punctis leviter impressis, pallide picco tinctis; singulis linea suturali angusta, ante apicem abbreviata, punctisque tribus, uno super callum humeralem, altero infra basin prope suturam, tertioque prope medium disci positis, nigro-piceis.

Long. 4 lin.

Hab. Brazil, Constancia. Collected by the late Rev. H. Clark.

Face elevated between the eyes, the latter large, prominent; vertex and front granulose, impressed with large, irregular shallow punctures; encarpæ large, well defined, quadrate, contiguous; carina linear, strongly elevated; inner orbit of eye bounded by a row of irregular punctures; antennæ filiform, third and fourth joints equal. Thorax with its sides broadly margined, reflexed, rounded and converging from base to apex, the anterior angles thickened, produced anteriorly, subacute; the hinder angles produced into a short subacute tooth; basal margin sinuate on either side, the median portion also sinuate in front of the scutellum; upper surface nitidous, very finely strigose, lateral margin longitudinally concave. Scutellum trigonate, its apex subacute. Elytra broader than the thorax, narrowly oblong, subacutely rounded at the apex, the apical margin obsoletely crenulate; above moderately convex, impressed with round, shallow, pale piceous punctures, paler and less deeply impressed towards the apex, their interspaces finely granulose, faintly wrinkled; each elytron with a narrow sutural line, abbreviated before the apex, and three small spots, nigro-piceous; of these the first is placed on the upper portion of the humeral callus, the second on the inner disk, halfway between the callus and the suture, slightly lower than the former one, and the third on the middle of the elytron, about halfway between the suture and the lateral margin.

Ædionychis rugiceps.

Æ. ovata, convexa, nigra, nitida, thorace flavo-albo, linea basali, utrinque abbreviata, maculisque novem, 2 super marginem apicalem, 4 disci vix ante, 2 vix pone medium transversim positis, necnon una ante basin, nigris; elytris subopacis, margine exteriori, vitta discoidali, apice ad marginem adfixa, fasciaque obliqua subapicali inter limbum et vittam extensa, nitide flavo-albis.

Long. 3 lin.

Hab. Brazil, Parana.

Head coarsely rugose; encarpæ and carina ill-defined, the lower end of the latter terminating on a strongly raised transverse ridge; antennæ scarcely half the length of the body, moderately robust, thickened towards the apex, entirely black; third and fourth joints nearly equal in length. Thorax nearly three times as broad as long; sides broadly margined, reflexed, straight and parallel, rounded and converging before the middle, anterior angles produced, thickened, obtuse; basal margin slightly oblique and faintly sinuate on either side near the outer angle, the latter produced, acute; intermediate space obtusely truncate, narrowly edged with black; disk finely granulose, nitidous, sparingly punctate; lateral margin concave, the outer edge thickened. Scutellum trigonate, rather broader than long, its apex obtuse. Elytra broader than the thorax, oblong-ovate, moderately convex, finely granulose-punctate, subopaque; the white marking nitidous, finely punctured.

Edionychis nigro-lineata.

Æ. ovata, modice convexa, nitida, subtus piceo-nigra, prothorace abdominisque limbo exteriori sordide fulvis; supra sordide fulva, vertice, scutello antennisque (harum articulis basalibus tribus piceis exceptis) nigris; thorace lævi, tenuiter, remote punctato, maculis quinque, 2 et 3 dispositis, nigro-piceis notato; elytris evidenter, subcrebre punctatis, utrinque linea suturali, vitta submarginali, apice cum linea suturali conjuncta vittaque discoidali, a basi fere ad apicem extensa, nigris.

Long. $2\frac{1}{2}$ lin.

Hab. Brazil, Bahia.

Vertex smooth, nearly impunctate, lower portion of front coarsely punctured; encarpæ subquadrangular, separated from the front by a deep longitudinal groove; antennæ robust, second and third joints nearly equal in length; labrum and jaws obscure piceous. Thorax with its sides broadly margined, straight and nearly parallel behind the middle, thence rounded and converging to the apex, anterior angles armed with a slightly excurved, obtuse tooth; upper surface nitidous, remotely and finely punctured, lateral margin reflexed. Scutellum trigonate; its apex obtuse, piceous. Elytra rather broader than the thorax, oval, moderately convex, much more strongly punctured than the thorax; lateral margin narrowly reflexed; inflexed limb obscure fulvous, its inner edge nigropiceous. Anterior border of prosternum deflexed. Basal joint of hinder tarsus nearly equal in length to the following two united.

Ædionychis Chevrolatii.

Æ. late ovata, convexa, nitida; subtus, cum capite (encarpis flavis exceptis), nigra, abdomine piceo, margine externo segmentorumque marginibus pallidioribus; supra flava; thorace lævi, impunctato; scutello trigonato, nigro; elytris sat remote, tenuiter punctatis, utrinque vitta suturali, altera submarginali, his apice conjunctis, tertiaque discoidali, paullo ante apicem abbreviata, nigro-cyaneis; limbo exteriore angusto piceo.

Long. 3 lin.

Hab. Mexico.

Vertex smooth, impunctate; inner orbit of eye and the upper surface of the front impressed with large, round punctures; lower portion of front very finely strigate; encarpæ separated from the front by a distinct transverse groove, subquadrangular, pale fulvous; carina strongly elevated; second and third joints of antennæ nearly equal in length. Thorax three times as broad as long; sides nearly straight, very slightly converging behind the middle, thence converging and slightly rounded to the apex; anterior angles mucronate; basal margin bisinuate on either side, the median portion not produced, obtusely truncate; upper surface shining, impunctate; lateral margin broadly reflexed. Scutellum trigonate, its apex acute. Elytra broader than the thorax, increasing in breadth from the base towards the apex, the latter broadly rounded; above moderately convex, longitudinally excavated along the base of the suture, the depressed surface rather strongly and coarsely punctured.

[To be continued.]

XXXVI.—*Studies on the Hydroïda*.

By C. MERESCHKOWSKY.

[Continued from p. 256.]

III. *Systematic Facts*.

As I am now busy preparing a complete description of all the Hydroïds occurring in the Russian seas, which will shortly appear in my native language, I shall here give simply a list of the species which I have met with in my two visits to the White Sea, and only describe a few of the new species and the new genera. The deficiency of material in respect of Hydroïds in our zoological museums sometimes renders the determination of the species very difficult, and in some cases rather doubtful; for frequently it is very desirable to compare two specimens, one of which is already determined. But I